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EXAMINER	
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ART UNIT	PAPER NUMBER
2664	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/814,356	MOON, BILLY G.	
	Examiner	Art Unit	
	Jamal A Fox	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/21/2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37,39,41,43 and 45* is/are rejected.

7)☒ Claim(s) *38,40,42,44 and 46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/21/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7 and 32-37, 39, 41, 43 and 45 are rejected under 35 U.S.C. 103(a) as being obvious over Moon et al. (Application No. 09670055) in view of Wager et al. (U.S. Patent No. 6,691,273).

The applied reference has a common --*assignee*-- with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the

reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Referring to claim 1, Moon et al. discloses a communication system, comprising: a mobile unit (Fig. 4 ref. sign 12 and respective portions of the spec.) operable to transmit content; a plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), each base transceiver station operable to: receive (receives, page 14 lines 19-20) the content from the mobile unit; determine a value for a metric (metric, page 15 lines 12-13) associated with communications between the mobile unit and the base transceiver station; generate (generate, page 15 lines 13-15) a graded packet including the value and the content; and communicate (forward, page 15 lines 15) the graded packet; and a router (router, page 15 lines 23-31) operable to: receive redundant (multiple copies, page 14 lines 21-27) graded packets generated at the base transceiver stations; but does not explicitly teach of combining different portions of the content from each of two more of the graded packets to create an improved packet, the different portions from the graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content; and communicate the improved packet. However, Wager et al. discloses combining (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) different portions of the content from each of two more of the graded packets (data packet, col. 2 lines 60-67) to create an improved packet (Result, Fig. 4 and Fig. 6), the different portions (bit positions, Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines

9-27) from the graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content; and communicate (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the improved packet. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the combining portions and packet communicating of Wager et al. to the invention of Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 2, Wager et al. discloses the system of claim 1, wherein the router is further operable to: determine the portions of the content in two or more of the graded packets include errors (errors, col. 3 lines 29-31) created during communication of the content; and combine different errorless (error free, col. 3 lines 35-40) portions of the content from each of two or more graded packets to create the improved packet, the content of the improved packet having fewer errors (error free, col. 4 lines 9-27) that the content included in the graded packets.

Referring to claim 3, Wager et al. discloses the system of claim 1, wherein the router is further operable to: evaluate each corresponding bit in two or more graded packets (data packet, col. 2 lines 60-67); estimate (found, col. 3 lines 55-60) the correct value of each bit based on the evaluation; and generate (generated, col. 4 lines 20-25) an improved packet including the estimated correct value for each bit.

Referring to claim 4, Wager et al. discloses the system of claim 3, wherein evaluating each corresponding bit comprises performing an exclusive-or (exclusive or-ed, col. 3 lines 41-46) operation on the corresponding bits.

Referring to claim 5, Wager et al. discloses the system of claim 1, wherein the router is further operable to: select two or more (plurality of data packets, col. 3 lines 25-30) of the graded packets based on the value included in each graded packet; and combine (combine, col. 3 lines 15-20) different portions of the content from two or more of the selected packets to create the improved packet.

Referring to claim 6, Wager et al. discloses the system of claim 1, wherein the mobile unit (mobile station, col. 2 lines 35-45) is operable to transmit a packet that includes the content.

Referring to claim 7, Moon et al. discloses the system of claim 1, wherein the content comprises voice content (voice information, page 16 lines 21-25) received from a user of the mobile unit.

Referring to claim 32, Moon et al. discloses a communications system, comprising: a first mobile unit (Fig. 4 ref. sign 44 and respective portions of the spec.) operable to transmit a first content; a second mobile unit (Fig. 4 ref. sign 46 and respective portions of the spec.) operable to transmit a second content; a plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), each base transceiver station operable to: receive (receives, page 14 lines 19-20) the content from at least one of the mobile units; determine a value for a metric (metric, page 15 lines 12-13) associated with communications between the mobile unit and the base transceiver station; generate (generate, page 15 lines 13-15) a graded packet including the value and the content; and communicate (forward, page 15 lines 15) the graded packet; and one or more routers (router, page 15 lines 23-31) collectively

operable to: receive (receives, page 15 lines 23-31) a plurality of first graded packets including the first content and a plurality of second graded packets including the second content; select (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets; select (selects, page 15 lines 26-28) on of the second graded packets based on the values included in the second graded packets; but does not explicitly teach of mixing the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicate the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 33, Wager et al. discloses the system of Claim 32, wherein the selecting steps and the mixing step are performed by a single router (Fig. 1 ref. sign 30 and respective portions of the spec.).

Referring to claim 34, Moon et al. discloses the system of claim 32, wherein the selecting steps are performed by multiple routers (routers, page 15 lines 23-31) but

does not explicitly teach of the mixing step being performed by multiple routers. However, Wager et al. discloses a mixing step in (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing step of Wager et al. to the selecting step of Moon et al. in order to perform a distributed selection process that allows for mobile units to communicate with multiple base transceiver stations as suggested by Moon et al.

Referring to claim 35, Moon et al. discloses the system of claim 32 wherein the one or more routers comprise: a first router (router, page 15 line 23) operable to: receive (receives, page 15 lines 23-31) a plurality of first graded packets and the plurality of second graded packets; select (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets; select (selects, page 15 lines 26-28) one of the second graded packets based on the values indicated in the second graded packets; and communicate the selected packets; and a second router (router, page 15 line 26) operable to: receive (receives, page 15 line 26) the selected packets; but does not explicitly teach of mixing the first content of the selected first graded packet and the second content of the selected second graded packet to create a mixed packet including the first and second contents; and communicating the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected second graded packet to create a mixed packet including the first and second contents; and communicating (forwarded, col. 3 lines 35-

40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 36, Moon et al. discloses the system of claim 32 further comprising: a third mobile unit (Fig. 4 ref. sign 12 and respective portions of the spec.) operable to transmit a third content to a plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.); and an additional router (router, page 15 lines 23-31), operable to: receive a plurality of third graded packets including the third content (Fig. 4 ref. sign 50); select (selects, page 15 line 27) one of the third graded packets based on the values included in the third graded packets; but does not explicitly teach of receiving a first mixed packet including the first and second content; mixing the third content of the selected third graded packet and the first and second content to create a second mixed packet including the first, second, and third contents; and communicating the second mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the content of the selected graded packets; and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the

invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 37, Moon et al. discloses the system of claim 32, wherein: the first mobile unit is operable to transmit a packet that includes the first content (Fig. 4 ref. sign 50 and respective portions of the spec.); and the second mobile unit is operable to transmit a packet that includes the second content (Fig. 4 ref. sign 52 and respective portions of the spec.).

Referring to claim 39, Moon et al. discloses a network device, comprising: an interface operable to: receive (receives, page 15 line 23) a plurality of first graded packets from two or more of the plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the first graded packets (graded packets, page 15 line 23) include a first content received from a first mobile unit and a value metric (metrics, page 15 line 24) generated by each base transceiver station, the metric associated with communication between the first mobile unit and the base transceiver station; receive (receives, page 15 line 26) a plurality of second graded packets (graded packets, page 15 line 26) from two or more of the plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the second graded packets include a second content received from a second mobile unit and a value for a metric (metrics, page 15 line 28) generated by each base transceiver station, the metric associated with communications between the second mobile unit and the base transceiver station; a processor operable to: select (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets;

select (selects, page 15 lines 26-28) one of the second graded packets based on the values included in the second graded packets; but does not explicitly teach of mixing the first content of the selected first graded packet and the second content of the selected second graded packet to create a mixed packet including the first and second contents; and communicating the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 41, Moon et al. discloses a method for mixing packets, comprising: receiving (receives, page 15 line 23) a plurality of first graded packets from two or more of a plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the first graded packets (graded packets, page 15 line 23) include a first content received from a first mobile unit and a value for a metric (metrics, page 15 line 24) generated by each base transceiver station, the metric associated with communications between the first mobile unit and the base transceiver station; receiving (receives, page 15 line 26) a plurality of second graded packets (graded packets, page 15 line 26) from two or more of the plurality of base transceiver

stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the second graded packets include a second content received from a second mobile unit and a value for a metric (metrics, page 15 line 28) generated by each base transceiver station, the metric associated with communications between the second mobile unit and the base transceiver station; selecting (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets; selecting (selects, page 15 lines 26-28) one of the second graded packets based on the values included in the second graded packets; but does not explicitly teach of mixing the first content of the selected first graded packet and the second content of the selected second graded packet to create a mixed packet including the first and second contents; and communicating the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 43, Moon et al. discloses software for mixing packets, the software embodied in a computer-readable medium and operable to: receive (receives, page 15 line 23) a plurality of first graded packets (graded packets, page 15 line 23)

from two or more of the plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the first graded packets include a first content received from a first mobile unit and a value metric (metrics, page 15 line 24) generated by each base transceiver station, the metric associated with communication between the first mobile unit and the base transceiver station; receive (receives, page 15 line 26) a plurality of second graded packets (graded packets, page 15 line 26) from two or more of the plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the second graded packets include a second content received from a second mobile unit and a value for a metric (metrics, page 15 line 28) generated by each base transceiver station, the metric associated with communications between the second mobile unit and the base transceiver station; select (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets; select (selects, page 15 lines 26-28) one of the second graded packets based on the values included in the second graded packets; but does not explicitly teach of mixing the first content of the selected first graded packet and the second content of the selected graded packet to create a mixed packet including the first and second contents; and communicating the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at

the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

Referring to claim 45, Moon et al. discloses a network device, comprising: means for receiving (receives, page 15 lines 23) a plurality of first graded packets from two or more of a plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the first graded packets (graded packets, page 15 line 23) include a first content received from a first mobile unit and a value for a metric (metrics, page 15 line 24) generated by each base transceiver station, the metric associated with communications between the first mobile unit and the base transceiver station; means for receiving (receives, page 15 line 26) a plurality of second graded packets (graded packets, page 15 line 26) from two or more of the plurality of base transceiver stations (Fig. 4 ref. sign 18 and respective portions of the spec.), wherein the second graded packets include a second content received from a second mobile unit and a value for a metric (metrics, page 15 line 28) generated by each base transceiver station, the metric associated with communications between the second mobile unit and the base transceiver station; means for selecting (selects, page 15 lines 23-25) one of the first graded packets based on the values included in the first graded packets; means for selecting (selects, page 15 lines 26-28) one of the second graded packets based on the values included in the second graded packets; but does not explicitly teach of a means for mixing the first content of the selected first graded packet and the second content of the selected second graded packet to create a mixed packet

including the first and second content; and a means for communicating the mixed packet. However, Wager et al. discloses mixing (Fig. 4 and col. 3 lines 5-11, 41-51, Fig. 6 and col. 4 lines 9-27) the first content of the selected first graded packet and the second content of the selected graded packet to create a mix packet including the first and second contents, and communicating (forwarded, col. 3 lines 35-40, 56-65 and col. 4 lines 29-30) the mixed packet. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the mixing of the graded packets and the communicating of the mixed packets of Wager et al. to the invention Moon et al. in order to create an improved error free packet as suggested by Wager et al.

3. Claims 8-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wager et al. (U.S. Patent No. 6,691,273).

Referring to claim 8, Wager et al. discloses a network device, comprising: an interface operable to receive a plurality of graded packets (data packet, col. 2 lines 60-67) from a plurality of base station transceiver stations (Fig. 1, ref. signs 20a, 20b and 20c and respective portions of the spec.), wherein the graded packets include a content received from a mobile unit and a value metric (quality information, col. 2 lines 55-65) generated by each base transceiver station, the metric associated with communications between the mobile unit (mobile station, col. 2 line 49) an the base transceiver station (base transceiver station, col. 2 line 50); and a processor (diversity handover unit, col. 3 lines 5-20) operable to combine different portions of the content from each of two or more of the graded packets to create an improved packet, the different portions from the

graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content (see Figures 4 and 6), but does not explicitly teach of the received plurality of graded packets being redundant. However, redundant bit information (col. 1 lines 38-44) and multiple versions of data packet (col. 2 lines 53-58) are disclosed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included receiving a plurality of redundant graded packets to the invention of Wager et al. in order to have the necessary packets available to perform the exclusive or step of the invention.

Referring to claim 9, Wager et al. discloses the network device of Claim 8, wherein the processor is further operable to: determine that portions of the content in two or more of the graded packets include errors (errors, col. 3 lines 29-31) created during communication of the content; and combine different errorless (error free, col. 3 lines 35-40) portions of the content from each of two or more graded packets to create the improved packet, the content of the improved packet having fewer errors (error free, col. 4 lines 9-27) than the content included in the graded packets.

Referring to claim 10, Wager et al. discloses the network device of Claim 8, wherein the processor is further operable to: evaluate each corresponding bit in two or more graded packets (data packet, col. 2 lines 60-67); estimate (found, col. 3 lines 55-60) the correct value of each bit based on the evaluation; and generate (generated, col. 4 lines 20-25) an improved packet including the estimated correct value for each bit.

Referring to claim 11, Wager et al. discloses the network device of Claim 10, wherein evaluating each corresponding bit comprises performing an exclusive-or (exclusive or-ed, col. 3 lines 41-46) operation on the corresponding bits.

Referring to claim 12, Wager et al. discloses the network device of Claim 8, wherein the processor is further operable to: select two or more (plurality of data packets, col. 3 lines 25-30) of the graded packets based on the value included in each graded packet; and combine (combine, col. 3 lines 15-20) different portions of the content from two or more of the selected packets to create the improved packet.

Referring to claim 13, it is inherent that the content comprises voice content received from a user of the mobile unit because voice and data are transmitted and received in digital cellular mobile systems.

Referring to claim 14, Wager et al. discloses a method of creating an improved packet, comprising: receiving a plurality of graded packets (data packet, col. 2 lines 60-67) from a plurality of base station transceiver stations (Fig. 1, ref. signs 20a, 20b and 20c and respective portions of the spec.), wherein the graded packets include a content received from a mobile unit and a value metric (quality information, col. 2 lines 55-65) generated by each base transceiver station, the metric associated with communications between the mobile unit (mobile station, col. 2 line 49) an the base transceiver station (base transceiver station, col. 2 line 50); and combining different portions of the content from each of two or more of the graded packets to create an improved packet, the different portions from the graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content (see Figures

4 and 6), but does not explicitly teach of the received plurality of graded packets being redundant. However, redundant bit information (col. 1 lines 38-44) and multiple versions of data packet (col. 2 lines 53-58) are disclosed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included receiving a plurality of redundant graded packets to the invention of Wager et al. in order to have the necessary packets available to perform the exclusive or step of the invention.

Referring to claim 15, Wager et al. discloses the method of Claim 14, further comprising: determining that portions of the content in two or more of the graded packets include errors (errors, col. 3 lines 29-31) created during communication of the content; and combining different errorless (error free, col. 3 lines 35-40) portions of the content from each of two or more graded packets to create the improved packet, the content of the improved packet having fewer errors (error free, col. 4 lines 9-27) than the content included in the graded packets.

Referring to claim 16, Wager et al. discloses the method of Claim 14, further comprising: evaluating each corresponding bit in two or more graded packets (data packet, col. 2 lines 60-67); estimating (found, col. 3 lines 55-60) the correct value of each bit based on the evaluation; and generating (generated, col. 4 lines 20-25) an improved packet including the estimated correct value for each bit.

Referring to claim 17, Wager et al. discloses the method of Claim 16, wherein evaluating each corresponding bit comprises performing an exclusive-or (exclusive or-ed, col. 3 lines 41-46) operation on the corresponding bits.

Referring to claim 18, Wager et al. discloses the method of Claim 14, further comprising: selecting two or more (plurality of data packets, col. 3 lines 25-30) of the graded packets based on the value included in each graded packet; and combining (combine, col. 3 lines 15-20) different portions of the content from two or more of the selected packets to create the improved packet.

Referring to claim 19, it is inherent that the content comprises voice content received from a user of the mobile unit because voice and data are transmitted and received in digital cellular mobile systems.

Referring to claim 20, Wager et al. discloses software (combining functionality logic, Fig. 1 ref. sign 50 and col. 3 lines 5-11) for creating an improved packet, the software embodied in a computer-readable medium (Fig. 1 ref. sign 30 and col. 3 lines 5-20) and operable to: receive a plurality of graded packets (data packet, col. 2 lines 60-67) from a plurality of base station transceiver stations (Fig. 1, ref. signs 20a, 20b and 20c and respective portions of the spec.), wherein the graded packets include a content received from a mobile unit and a value metric (quality information, col. 2 lines 55-65) generated by each base transceiver station, the metric associated with communications between the mobile unit (mobile station, col. 2 line 49) an the base transceiver station (base transceiver station, col. 2 line 50); and combine different portions of the content from each of two or more of the graded packets to create an improved packet, the different portions from the graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content (see Figures 4 and 6), but does not explicitly teach of the

received plurality of graded packets being redundant. However, redundant bit information (col. 1 lines 38-44) and multiple versions of data packet (col. 2 lines 53-58) are disclosed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included receiving a plurality of redundant graded packets to the invention of Wager et al. in order to have the necessary packets available to perform the exclusive or step of the invention.

Referring to claim 21, Wager et al. discloses the software of Claim 20, further operable to: determine that portions of the content in two or more of the graded packets include errors (errors, col. 3 lines 29-31) created during communication of the content; and combine different errorless (error free, col. 3 lines 35-40) portions of the content from each of two or more graded packets to create the improved packet, the content of the improved packet having fewer errors (error free, col. 4 lines 9-27) than the content included in the graded packets.

Referring to claim 22, Wager et al. discloses the software of Claim 20, further operable to: evaluate each corresponding bit in two or more graded packets (data packet, col. 2 lines 60-67); estimate (found, col. 3 lines 55-60) the correct value of each bit based on the evaluation; and generate (generated, col. 4 lines 20-25) an improved packet including the estimated correct value for each bit.

Referring to claim 23, Wager et al. discloses the software of Claim 22, wherein evaluating each corresponding bit comprises performing an exclusive-or (exclusive or-ed, col. 3 lines 41-46) operation on the corresponding bits.

Referring to claim 24, Wager et al. discloses the software of Claim 20, further operable to: select two or more (plurality of data packets, col. 3 lines 25-30) of the graded packets based on the value included in each graded packet; and combine (combine, col. 3 lines 15-20) different portions of the content from two or more of the selected packets to create the improved packet.

Referring to claim 25, it is inherent that the content comprises voice content received from a user of the mobile unit because voice and data are transmitted and received in digital cellular mobile systems.

Referring to claim 26, Wager et al. discloses a network device, comprising: means (Fig. 1 ref. sign 30) for receiving a plurality of graded packets (data packet, col. 2 lines 60-67) from a plurality of base station transceiver stations (Fig. 1, ref. signs 20a, 20b and 20c and respective portions of the spec.), wherein the graded packets include a content received from a mobile unit and a value metric (quality information, col. 2 lines 55-65) generated by each base transceiver station, the metric associated with communications between the mobile unit (mobile station, col. 2 line 49) an the base transceiver station (base transceiver station, col. 2 line 50); and means for combining (Fig. 1, combining functionality logic and col. 3 lines 5-20), different portions of the content from each of two or more of the graded packets to create an improved packet, the different portions from the graded packets collectively representing the entirety of the content such that the improved packet includes the entirety of the content (see Figures 4 and 6), but does not explicitly teach of the received plurality of graded packets being redundant. However, redundant bit information (col. 1 lines 38-44) and multiple

versions of data packet (col. 2 lines 53-58) are disclosed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included receiving a plurality of redundant graded packets to the invention of Wager et al. in order to have the necessary packets available to perform the exclusive or step of the invention.

Referring to claim 27, Wager et al. discloses the network device of Claim 26, further comprising: means (Fig. 1 ref. sign 30) for determining that portions of the content in two or more of the graded packets include errors (errors, col. 3 lines 29-31) created during communication of the content; and means for combining (Fig. 1, combining functionality logic and col. 3 lines 5-20) different errorless (error free, col. 3 lines 35-40) portions of the content from each of two or more graded packets to create the improved packet, the content of the improved packet having fewer errors (error free, col. 4 lines 9-27) than the content included in the graded packets.

Referring to claim 28, Wager et al. discloses the network device of Claim 26, further comprising: means (Fig. 1 ref. sign 30) for evaluating each corresponding bit in two or more graded packets (data packet, col. 2 lines 60-67); means (Fig. 1 ref. sign 30) for estimating (found, col. 3 lines 55-60) the correct value of each bit based on the evaluation; and means (Fig. 1 ref. sign 30) for generating (generated, col. 4 lines 20-25) an improved packet including the estimated correct value for each bit.

Referring to claim 29, Wager et al. discloses the network device of Claim 28, wherein evaluating each corresponding bit comprises performing an exclusive-or (exclusive or-ed, col. 3 lines 41-46) operation on the corresponding bits.

Referring to claim 30, Wager et al. discloses the network device of Claim 26, further comprising: means (Fig. 1 ref. sign 30) for selecting two or more (plurality of data packets, col. 3 lines 25-30) of the graded packets based on the value included in each graded packet; and means (Fig. 1, combining functionality logic and col. 3 lines 5-20) for combining (combine, col. 3 lines 15-20) different portions of the content from two or more of the selected packets to create the improved packet.

Referring to claim 31, it is inherent that the content comprises voice content received from a user of the mobile unit because voice and data are transmitted and received in digital cellular mobile systems.

Allowable Subject Matter

4. Claims 38, 40, 42, 44 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. 22202, Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Jamal A. Fox

Jamal A. Fox